

I CLAIM:

1. A self tightening, ankle brace,  
comprising combination,
  - a) strap structure including first and  
second elongated strap portions, said structure defining  
a through slit,
  - b) said first portion adapted to be wrapped  
about an ankle,
  - c) said second portion adapted to extend  
through the slit, then downwardly at one side of the  
ankle, then underfoot, and then upwardly at the opposite  
side of the ankle, for operative attachment and said  
first portion.
2. The combination of claim 1 wherein said  
structure forms a unitary strap incorporating said first  
and second portions.
3. The combination of claim 1 wherein the  
second portion is folded relative to the first portion,  
proximate the slit.

4. The combination of claim 3 wherein the slit extends at an angle  $\alpha$  relative to the strap first portion direction of elongation, where

$$40^\circ < \alpha < 50^\circ.$$

5. The combination of claim 1 including stiffener means on the strap portion proximate the slit.

6. The combination of claim 1 including an adjustable hook and pile connection defining said attachment.

7. The method of establishing a self tightening ankle brace in operative position which includes

a) providing strap structure including first and second elongated strap portions, said structure defining a through slit,

b) wrapping the strap first portion about a leg just above or proximate the malleolus,

c) passing said strap second portion through the slit and then downwardly at one side of the ankle, then underfoot, and then upwardly at the opposite side of the ankle, in operative attachment with said first portion.

8. The method of claim 7 including operatively attaching the strap second portion to the strap first portion via hook and pin elements to tighten the strap second portion under foot.

9. The method of claim 7 including allowing the strap second portion to self adjustingly slide endwise in said slit, in response to ankle flexing, assisting tightening of the strap structure.

10. The method of claim 7 including forming said slit to extend at an angle  $\alpha$  relative to the strap first portion direction of elongation, where

$$40^\circ < \alpha < 50^\circ.$$

11. The method of claim 7 including folding the strap structure to cause the strap second portion to extend downwardly through the slit.